



U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety
Administration

1200 New Jersey Avenue, SE
Washington, D.C. 20590

JUN 20 2008

Mr. William H. Orth III
Explosive Operator Inspector Leader
Directorate of Logistics
ATTN: IMPA-FWA-LSS
P.O. Box 35010
Fort Wainwright, AK 99703-7000

Ref. No. 08-0120

Dear Mr. Orth:

This responds to your April 29, 2008 email requesting clarification of the requirements for special stowage of explosives aboard vessels under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether special stowage requirements in § 176.136(c) apply to all Class 1 explosives in compatibility groups G or H or applies to only those Class 1 explosives in compatibility groups G or H that are also assigned stowage codes "15E" or "20E" in Column (10B) of the § 172.101 Hazardous Materials Table (HMT).

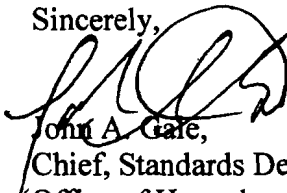
Special stowage requirements under § 176.136(c) do not apply to all Class 1 (explosive) materials in compatibility groups G and H nor do they apply solely to those Class 1 (explosive) materials in compatibility groups G and H that are also assigned stowage codes "15E" or "20E" in Column (10B) of the HMT. Under § 176.128, Class 1 (explosive) substances and *certain* articles are subject to varying levels of containment such as "special stowage" when stowed below deck. Special stowage is required for explosive substances, n.o.s. in compatibility groups G or L and *certain* articles in compatibility groups G, H, L and K that are particularly hazardous. For example, some explosive articles in compatibility groups G and H are particularly hazardous because of the risk of fire or leakage of the contents, accompanied by smoke or by tear-producing gas. These explosive articles are assigned stowage code "8E" to indicate the articles require special stowage in accordance with § 176.136. Stowage code "8E" states "when under deck, special stowage is required" (as required by § 176.128). To use the examples of explosive articles shipping descriptions provided in your email, "Ammunition, smoke," UN0303, 1.4G is subject to special stowage as indicated by the assignment of stowage code "8E" in Column (10B) of the HMT, whereas "Ammunition, incendiary, UN0300, 1.4G is not subject because it is not assigned stowage code "8E." For explosive articles such as "Ammunition, smoke," UN0303 that are assigned stowage code "8E," they are also assigned additional stowage codes such as "15E" or "20E" to ensure safe transport of the materials aboard vessels. However, explosive substances using the shipping description "Substance, explosive, n.o.s.," UN0485, 1.4G, for example,

are subject to special stowage including § 176.136(c) as required by § 176.128 even though the description is not assigned stowage code "8E." Therefore, concerning your question, § 176.136(c) applies to Class 1 (explosive) materials in compatibility groups G or H subject to special stowage as defined by § 176.128.

We note in regard to the examples provided in your email, where a freight container is used to transport Class 1 (explosive) materials in accordance with § 176.136(c), a fillet of cement is not necessarily required to satisfy the leakproof requirement. Rather, a fillet of cement is an example of an option that can be used to render the floor of an all-metal freight container leakproof.

I hope this information is helpful. Please contact us if you require additional assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Gale", is written over a circular stamp or seal.

John A. Gale,
Chief, Standards Development
Office of Hazardous Materials Standards

cc:

Joe Dugan
Surface Deployment and Distribution Command (SDDC) Safety Office
Department of the Army

Der Kinderen
§ 176.136(c)
Vesse /
08-0120

Drakeford, Carolyn <PHMSA>

From: INFOCNTR <PHMSA>
Sent: Wednesday, April 30, 2008 9:08 AM
To: Drakeford, Carolyn <PHMSA>
Cc: 'bill.orth@us.army.mil'
Subject: FW: Request for Written interpretation of section 176.136(c) of CFR 49 (UNCLASSIFIED)

From: Orth, William H Mr CIV USA IMCOM [mailto:bill.orth@us.army.mil]
Sent: Tuesday, April 29, 2008 5:46 PM
To: INFOCNTR <PHMSA>
Cc: john.ignaczak@us.army.mil; mark.renner@us.army.mil
Subject: Request for Written interpretation of section 176.136(c) of CFR 49 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Request a written letter of interpretation for CFR 49, Section 176.136(c), Special Stowage, as it specifically pertains to having to make an DOD or ISO freight container leakproof. Does this paragraph only apply to those Class 1, compatibility group G or H items with provision 15E[1][1] or 20E[2][2] in the Hazmat Table 172-101, column 10B, or to all Class 1 items in those compatibility groups? My current interpretation is that Ammunition, Incendiary UN 0300 1.4G, packaged IAW the applicable Para in section 173, does not require the use of a fillet of cement or other material across the bottom of the door opening as there is no provision listed in the table 172.101. However; Ammunition, Smoke, UN 0303 1.4G, would require the application of the cement as it has provision 15E listed in table 172.101, column 10B.

Thanks!

William H. Orth III

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WL-6, Explosive Operator Inspector Leader

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4/30/2008

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Classification: **UNCLASSIFIED**

Caveats: NONE

[1][1] On deck, cargo transport unit must be leakproof

[2][2] Stowage category "03" for projectiles or cartridges for guns, cannons or mortars; Stowage category "07" for other types; magazines must be of steel construction that prevents leakage.